COMPAQ
Integration Note

January 2000

118R-1099A-WWEN

Prepared by OS Integration

Compaq Computer Corporation

Contents

Overview **3**
Software Tips **3**
General OS Tips 4
Command Tips 4
Driver and Utility Tips 6
Software Application Tips 11
Hardware/Firmware Tips **13**
Server Installation and Configuration Tips 13
Memory Tips 17
Monitor and Screen Saver Tips 17
Network Tips 18
Processor Tips 18
Storage Tips 19
Helpful Websites **21**
Conclusion **22**

Compaq Tips and Tricks for NetWare 5

Abstract: In September 1998, Novell successfully launched its powerful, next-generation network operating system, NetWare 5, that provides superior management and control of network applications and resources.

This Integration Note includes the latest and greatest hot tips, shortcuts, enhanced commands, and software tool descriptions that help network administrators, developers, and other users truly optimize the many features of a NetWare 5 system on a Compaq ProLiant platform.

More specifically, we present tips and tricks in the following areas:

- Software: general OS, commands, drivers and utilities, software applications
- Hardware/firmware: server installation and configuration, memory, monitor and screen saver, network, processor, storage

As Compaq and Novell engineers and field support teams continue to tune and test NetWare 5 on Compaq high-availability servers, we'll pass on any more juicy tidbits or *tricks* that they discover.

In January 2000 Novell released NetWare 5.1, an even more robust platform for developing and deploying open, web-based applications. In fact, it's a complete solution for an enterprise website. So, be sure to read the white paper *Compaq Tips and Tricks for NetWare 5.1,* available from the following websites:

- Compaq technical publications
- ActiveAnswers on Compaq.com
- NetWare 5 Online Competency Center

For more tips on Novell Directory Services (NDS), checkout the white paper ***Compaq Tips and Tricks for Novell Directory Services (NDS)*** *at the same websites listed above.*

Help us improve our technical communication. Let us know what you think about the technical information in this document. Your feedback is valuable and will help us structure future communications. Please send your comments to: Novell.feedback@Compaq.com

Downloaded from www.Manualslib.com manuals search engine

Notice

The information in this publication is subject to change without notice and is provided "AS IS" WITHOUT WARRANTY OF ANY KIND. THE ENTIRE RISK ARISING OUT OF THE USE OF THIS INFORMATION REMAINS WITH RECIPIENT. IN NO EVENT SHALL COMPAQ BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION OR LOSS OF BUSINESS INFORMATION), EVEN IF COMPAQ HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

The limited warranties for Compaq products are exclusively set forth in the documentation accompanying such products. Nothing herein should be construed as constituting a further or additional warranty.

This publication does not constitute an endorsement of the product or products that were tested. The configuration or configurations tested or described might or might not be the only available solution. This test is not a determination or product quality or correctness, nor does it ensure compliance with any federal state or local requirements.

Product names mentioned herein might be trademarks and/or registered trademarks of their respective companies.

Compaq, Compaq Insight Manager, ROMPaq, and SmartStart, are registered with the United States Patent and Trademark Office. Netelligent and SoftPaq are trademarks and/or service marks of Compaq Computer Corporation.

GroupWise, intraNetWare, ManageWise, NetWare, Novell, NDS, Novell Directory Services, and Novell Storage Services are registered trademarks, and BorderManager, ConsoleOne, eDirectory, NDS Corporate Edition, and Z.E.N.works are trademarks of Novell, Inc.

Microsoft, Windows, and Windows NT are trademarks and/or registered trademarks of Microsoft Corporation.

Pentium is a registered trademark of Intel Corporation.

Copyright ©2000 Compaq Computer Corporation. All rights reserved. Printed in the U.S.A.

Compaq Tips and Tricks for NetWare 5
Integration Note prepared by OS Integration

Third Edition (January 2000)

Second Edition (December 1999)

First Edition (October 1999)
Document Number 118R-1099A-WWEN

Downloaded from www.Manualslib.com manuals search engine

Overview

With NetWare 5, Novell offers some pretty cool extras, like *pure* IP that exemplifies Novell's new strategic direction and commitment to the Internet. NetWare 5 was also designed to be more tightly integrated with hardware and most optimally with the equipment it's most familiar with—Compaq ProLiant servers, of course. This tight integration with hardware results in quicker, more reliable installations and configurations; powerful debugging tools; dynamic programming with NetWare Loadable Modules (NLMs); and a higher performing intranet. It's a network administrator's dream.

This Integration Note highlights some of the more powerful NetWare 5 commands, OS intricacies, software descriptions, and hardware utilization tips. Does it contain everything you ever wanted to know about OS integration? No. Consider it a documentation upgrade, or booster-supplement, to other NetWare 5 manuals and Compaq reference materials.

Major topics include the following software and hardware/firmware tips:

- Command tips
- Driver and utility tips
- Software application tips
- Server installation and configuration tips
- Memory tips
- Monitor and screen saver tips
- Network tips
- Processor tips
- Storage tips

As our engineers and field support teams uncover other pertinent tricks and hot tips, this document will be upgraded and available on the Internet. So keep your eyes peeled for updates or send us your tips. Until then, enjoy these tidbits.

Software Tips

Compaq and Novell continue their winning partnership with the release of NetWare 5 and all its high-tech features—such as ConsoleOne, Novell Directory Services (NDS), and Novell Storage Services (NSS). Compaq not only provides top-of-the-line, robust servers and options on which to run NetWare 5, it also provides the drivers and utilities to ensure NetWare 5 performs optimally on our hardware.

Although impossible to exclusively divide software tips from hardware tips, we have attempted to arrange the information in the most logical order so that you can quickly find what you need. So, if you can't find what you need under the "Software Tips" section, try the "Hardware/Firmware Tips" section.

Let's start with some general OS tips.

Downloaded from www.Manualslib.com manuals search engine

General OS Tips

To make your NetWare 5 installation a breeze, begin with Compaq SmartStart for Servers. Don't wait until later and wished you had. If you start off on the right foot, components—such as bardware drivers, management agents, server maintenance utilities, and other Compaq Support Software for Novell Products (Novell SSD)—will be seamlessly integrated with your NetWare 5 install. For more information on the SmartStart and Support Software CD-ROM, look at section "Drivers and Utilities."

And be sure to use the Compaq Management CD-ROM software to easily monitor and manage your Compaq servers, workstations, desktops, and portables. For more information on the Compaq Management CD-ROM software, look at section "Drivers and Utilities."

If you can't seem to start (boot) the NetWare 5 Server CD-ROM from your Compaq server, check the ROM BIOS date. If the date is prior to 07/98, you need to take a slight detour. You must either update your ROM BIOS or use the *CPQBOOT.EXE* SoftPaq. Decisions. Decisions.

Choice #1: Update your ROM BIOS with the latest version of the ROMPaq Utility available on the SmartStart CD-ROM, as well as from our Compaq website.

Choice #2: If your server doesn't have a BIOS update or flashing the ROM is not convenient, use the file *CPQBOOT.EXE* to create a floppy diskette that will enable you to boot the NetWare 5 Server CD-ROM and begin the installation. You can find *CPQBOOT.EXE* on the NetWare 5 Server CD-ROM (in *\INSTALL*), but you'll still need one non-write-protected floppy diskette to create the bootable diskette. There's just a little catch with this second choice: Since *CPQBOOT.EXE* writes an image file to the diskette, any data on the floppy will be overwritten. So use a blank diskette and be safe.

Remember to use a blank diskette.

The choice is yours.

And our last two generalized tips….

- Did you know that a free, DOS-like shell comes with NetWare 5, as well as NetWare 4.11 (intraNetWare)? Sure does. To enable the DOS-like shell, just enter the **NETBASIC** command. Then type SHELL at the command prompt. Now you can use NetBasic to browse file systems and copy files. You can even use **NETBASIC** while the server is running. However, Compaq can top this with its free Compaq File Manager (*CPQFM.NLM*). See the section "SmartStart and Support Software for Compaq Server Products Release 4.60."
- For NetWare 5, Support Pack 4 is packaged and installed separately (instead of included with the SmartStart and Support Software CD-ROM).

Command Tips

Did you know that…

- the **REMOVE DOS** command is no longer available?
- the **DOWN** command replaces **EXIT**?
- the **DISMOUNT ALL** command dismounts all NSS volumes with a single command?

Well, now you know. In fact, here are more details on the above items.

With server systems growing so quickly, the space occupied by DOS in memory becomes negligible. Most of you have probably never even worried about removing DOS to free up

Downloaded from www.Manualslib.com manuals search engine

memory. Tbat could be why the **REMOVE DOS** command is no longer a necessity and no longer available. Think simplicity and one less command to remember.

Novell also simplified other areas. For NetWare 5, Novell combined the former **DOWN** and **EXIT** commands into just one command: **DOWN**. The **DOWN** command's job description now includes three functions: (1) disconnecting the server from its clients, (2) unloading NetWare 5, and (3) returning you to the DOS prompt. Slick and fast! And not to worry because any events formerly triggered by the retired **EXIT** will still occur when you use just the **DOWN** command.

Here's a troubleshooting tip that you might not know off the top of your head.

Troubleshooting server issues could take a lot of time. Wouldn't you like to have your system configuration specifics right at your fingertips? Well, Novell thought you would and, consequently, added two new command options just for this purpose. The **DISPLAY ENVIRONMENT** command lists all your system's configuration defaults (straight-from-the-factory) parameters. To see what you've tweaked since the server landed, use **DISPLAY MODIFIED ENVIRONMENT**. Usually it's a much smaller list.

Let's clarify the CSET and SET commands.

Don't stop yet! Stay-tuned for one of the top tips so far.

Well, this is a great tip for those of us wbo can't remember more than three items in a row.

To manipulate OS environment parameters on the fly—without having to memorize all their names—use the **CSET** [CLASS] console command. A list of [CLASS] parameters will pop onto the screen. **CSET** will then walk through each variable in the class. No more boring memorization games or scratching parameters on small sheets of paper that always disappear when you need them. Isn't that great? We think so.

After examining the parameters, you can proceed as usual with the **SET** command. Two tips about **SET**:

- **SET** parameters are stored in the NetWare Configuration file and don't need to be added to the *AUTOEXEC.NCF* or *STARTUP.NCF* files.
- The **SET** command still works for altering any common parameters that are changed often.

A great way to learn all those NetWare settings.

You can also use *MONITOR.NLM* to modify your **SET** parameters. In the old NetWare 4.x days, you used the *SERVMAN* utility. However, *MONITOR.NLM* is more convenient.

Just use these three simple steps:

1. Start *MONITOR.NLM*.
2. Select Server Parameters.
3. Select the desired parameter from the list.

IMPORTANT: *MONITOR.NLM* must be loaded as the last NLM in the *AUTOEXEC.NCF*. This ensures an accurate read of the configured network server information. If changes are made to the console, unload *MONITOR.NLM* and reload it after the change has been made.

Let's talk a little about RCONSOLE.

The DOS-based **RCONSOLE** command lets you remotely access a server. What you see on your RCONSOLE screen is what you'd see on the remote server's screen if you were actually sitting in front of it. However, due to the nature of the interface, a GUI is unavailable to remote sessions. That means no pictures or mouse movements; **RCONSOLE** is limited to text. If you try to use

Downloaded from www.Manualslib.com manuals search engine

(+) or (–) to cycle through remote windows, the GUI will not appear, even if it's active on the server.

For easy console access, just add the following to the end of your *AUTOEXEC.NCF* file:

```
REMOTE [somepassword]
RSPX
```

Now you'll always have access to the console—without any extra work. Just load *RCONSOLE.EXE* from *SYS:PUBLIC* (usually on the Z:drive); select SPX; then pick a server.

Need an encrypted password? Easy. Just type REMOTE. Then type REMOTE ENCRYPT [yourpassword]. You'll then see the command syntax to use for adding your encrypted password to the *AUTOEXEC.NCF* file. At the prompt, type YES, which writes the information to *LDREMOTE.NCF*.

IMPORTANT: Don't use the **REMOTE** command to change your current password. If you have used **INETCFG** to set your remote password, you must use the same command to change your password.

Driver and Utility Tips

Many of the drivers and utilities that Compaq provides can be found on the SmartStart and Support Software CD-ROM and the Compaq Management CD-ROM, both of which ship with your server. Most of these products are called NetWare Loadable Modules or simply NLMs.

Here you have it: the scoop on those NLMs.

NetWare Loadable Modules (NLMs) are powerful code packages, or programs, that give you more control of your system. If you really want to enhance your computer system, learn which NLMs exist, how they optimize performance, and where you can retrieve them. For simplicity, Novell even removed the **LOAD** command in NetWare 5 so you can save some keystrokes. To launch NLMs without the **LOAD** command, simply type the module name. (In a year's time this saves a lot of keystrokes.)

- To check if a specific module has been loaded, enter the **MODULES** command, followed by the name of the module: [MODULE_NAME]. When searching for a particular module, wildcards are allowed. If you forget the module's name, you can just type MODULES. You can then view the list of every NLM that has been loaded since the server started.
- Some NLMs are contained inside the *SERVER.EXE* file and are always proceeded by an asterisk (*). These NLMs are called Bound-In and are loaded in a predetermined order when you start the server. Also see the section: "Server Installation and Configuration."
- *JAR.NLM, TAR.NLM*, and *ZIP.NLM* are included with NetWare 5 and give you command-line access to compression utilities. There is no need to download the files separately.
- *NWCONFIG.NLM* now replaces *INSTALL.NLM*.
- The Novell Event Bus (*NEB.NLM*) facilitates communication between the software modules, such as *CPQHLTH.NLM* and *NWPA.NLM*; management agents; and device drivers. That's why you must remember to load *NEB.NLM* before the *CPQHLTH.NLM* driver and before any command to manually load HAMs or CDMs, which would force NWPA to be loaded.
- Make certain that the latest versions of drivers and other NLMs are located in both *C:\NWSERVER* and *C:\NWSERVER\DRIVERS*. Why? Because NetWare 5 searches *C:\NWSERVER* and *C:\NWSERVER\DRIVERS* for drivers when a new hot-pluggable device

Downloaded from www.Manualslib.com manuals search engine

Take heed!

is detected. If the server finds a different version of the driver in each location, the file in *C:\NWSERVER\DRIVERS* will be used for the new device and will replace (overwrite) the other one.

For more NLM tips, continue reading.

SmartStart and Support Software for Compaq Server Products Release 4.30

Good news! If you can remember the long name of this compact disc, you're halfway to grasping its powerful applications. The other half is even easier. Just open up the SmartStart CD-ROM that shipped with your server.

In order to ensure that Compaq servers are equipped with the latest features and drivers, each disc contains BIOS updates and the latest version of value-add drivers and utilities (powerful, customized NLMs). More specifically, SmartStart contains the following software for NetWare/Compaq systems:

- Compaq Array Configuration Utility — Setup program for Compaq array controllers; configures physical drives attached to the controller into arrays and logical drives that the OS uses.
- Compaq Array Diagnostic Utility — Diagnostics for Compaq drive arrays.
- Compaq Diagnostics Systems ROMPaq — ROM BIOS updates for Compaq Prosignia and ProLiant Servers.
- Compaq File Manager (*CPQFM.NLM*) — Utility that allows you to search, edit, and delete files, as well as change file attributes and get file version and date information.
- Compaq Options ROMPaq — Upgrades of programmable ROMs on Compaq options, such as disk controllers and drives.
- Compaq Support Software for Novell Products (Novell SSD) — Compaq drivers, utilities, patches, and information for enhancing NetWare 5 on Compaq systems.
- Compaq System Configuration Utility — A utility that aids in configuring your server and its expansion boards. Automatically allocates system resources—such as interrupts, DMA channels, memory, and I/O ports—among the installed expansion boards.

By the way, do you want all these latest and greatest software packages as they're released? Of course you do. In order to ensure that you receive the latest Compaq drivers and utilities, Compaq periodically updates its SmartStart and Support Software CD-ROM. Is it on a calendar system? No, only when new products and support software become available. Just click here to order our I-can't-live-without Compaq SmartStart subscription service (Product No. 195654-001).

If you already have your SmartStart CD-ROM and want to immediately reap the benefits, just follow these installation steps:

1. Insert the disk and mount the drive. The CD-ROM drive may be mounted either as a DOS drive or a NetWare volume.

IMPORTANT: The method of mounting is important because the path to the CD-ROM drive is needed to run the installation. If you mounted the drive using the DOS driver, access your CD-ROM drive as a drive letter, for example, D:. However, if your mounted your CD-ROM drive as a volume, then the system uses the volume label assigned to the CD-ROM drive, for example, CPQSMST400:

Downloaded from www.Manualslib.com manuals search engine

Understand all that? Good! Because these instructions apply whenever you need to access information or install software from a compact disc. Consequently, to save space and resources, we'll not repeat the details each time. Let's continue.

2. Run *NWCONFIG.NLM* on the server.
3. Select Product Options.
4. Select Products Not Listed.
5. Press **F3** to indicate the path to the CD-ROM drive. The path will appear as follows, where [VOL_NAME] is either the volume name or drive letter that refers to the location of the SmartStart CD-ROM.
6. Type [VOL_NAME]:\CPQSUPSW\NSSD to install the latest Compaq device drivers and utilities.

Note: To install Novell SSD v5.03 (or later) across the network, type CPQNSSU. By independently changing the source and destination from the installer menu, the Novell SSD can be installed from any server on the network to any other server without requiring the administrator to be at either location. The Novell SSD is also available from our Compaq website.

Let's look closer at some of the newer drivers and utilities on the Novell SSD.

Compaq Integrated Management Log Viewer (CPQIML.NLM)

The Compaq Integrated Management Log Viewer, *CPQIML.NLM*, allows you to view and manage server event data stored in the Integrated Management Log (IML). Available on most Compaq ProLiant servers, this log stores system events, critical errors, power-on messages, memory errors, and any catastrophic hardware or software errors that typically cause a system to fail.

Each event in the IML has one of the following statuses to identify the severity of the event.

- Informational — General information about a system event.
- Repaired — An indication that this entry has been repaired. (Critical and caution events are marked as repaired once the indicated issue has been resolved.)
- Caution — An indication that a non-fatal-error condition has occurred.
- Critical — An indication that a component of the system has failed.

The severity of the event and other information in the IML helps you to quickly identify and correct problems thus minimizing downtime. The IML Viewer also provides the following capabilities that enhance your administrator's ability to (1) identify, (2) correct, and (3) document your server health:

- Viewing IML events
- Sorting IML events
- Filtering IML events (the viewing of only desired event types)
- Masking IML events (customizing IML reports by selecting only certain fields)
- Recording maintenance events
- Marking IML data as repaired

Downloaded from www.Manualslib.com manuals search engine

- Archiving the IML to a data file for input to a text editor or spreadsheet application or other IML Viewer utility
- Clearing the IML
- Refreshing (manually re-reading and displaying entire IML)
- Customizing the Integrated Management Display (IMD)

  The IML Viewer supports the viewing and management of data displayed on the Compaq IMD, an integrated LCD panel installed on many of the latest Compaq servers. And the best part? You can customize the IMD to suit your needs and preferences.

IMPORTANT TIP: *CPQIML.NLM* requires *CPQHLTH.NLM* v4.04 or later for complete functionality. Although *CPQIML.NLM* v1.00 is compatible with earlier versions of *CPQHLTH.NLM,* some *CPQIML.NLM* capabilities might not be available.

CPQIML.NLM provides a rich set of online user messages describing all error conditions and suggested actions that you could encounter during execution of the utility. It also provides context-sensitive help panels through the **F1** function key for all *CPQIML.NLM* features.

Compaq Power Subsystem Utility (CPQPOWER.NLM)

The Compaq Power Subsystem Utility (*CPQPOWER.NLM*) is another Compaq server utility designed to provide online readings of all sensors within your server power supply, as monitored by *CPQHLTH.NLM*.

IMPORTANT TIP: *CPQHLTH.NLM* must be running and *CPQPOWER.NLM* must be able to communicate with it successfully in order to get the power supply data.

In addition, the utility incorporates the Compaq Power Down Manager that allows you to configure the intelligent power switch on ProLiant servers. To enable this feature, just add the SoftPwr parameter to the load *CPQHLTH.NLM* command.

```
CPQHLTH -SoftPwr
```

Simple enough? Good. After installation, *CPQPOWER.NLM* will display the following information:

- Power utilization and consumption: capacity, current usage, available, voltage, and temperature fan speed
- Configuration of intelligent power switch (Compaq Power Down Manager)

  Servers with this feature can (1) do nothing when the power switch is turned off (Power Down Lock), (2) power down as soon as the power switch is turned off, or (3) gracefully down when the power switch is pressed and before power is shut off to the server, thus, preventing accidental data corruption or loss. This feature is supported on all Compaq ProLiant servers.
- Redundant or non-redundant status of power supply
- System heat output status

Downloaded from www.Manualslib.com manuals search engine

IMPORTANT TIP: If updated drivers and components become available after your NetWare 5 purchase but before installation, you can still use the updated versions rather than the ones that came with NetWare 5. Just place the new release in *C:\NWUPDATE*; then run *INSTALL.BAT*, as usual. *INSTALL.BAT* checks this directory for any newer versions of drivers and system components and then automatically replaces the older versions.

On the SmartStart CD-ROM is another jewel that is often overlooked: CPQFM.NLM.

Compaq File Management Utility for NetWare (CPQFM.NLM)

CPQFM.NLM incorporates many common commands in a familiar, graphical, menu-driven interface. Not only a timesaver, it's free. That's right. Unlike many commercial products that offer less functionality, *CPQFM.NLM* is available free-of-charge on the SmartStart CD-ROM. It's also available on the *Compaq ActiveAnswers Resource Paq for Novell:* the snazzy Compaq and Novell Partnership CD-ROM packed with lots of multi-media information; such as videos, slide presentations, white papers, SoftPaqs, and utilities. By the way, you can order the resource kit from our Partnership website:

If you haven't already done so, you really need to check out the Compaq ActiveAnswers Resource Paq for Novell CD-ROM.

What an offer! Compaq is providing you with access to the same homegrown tools that we use in our labs, just in case you need to do some of the fun stuff we do. And the other information products really reduce the learning curve for Compaq and Novell products. Oops! We're side-tracking! Let's get back to the management utility.

By using *CPQFM.NLM*, you can save precious time when you (1) search for files, (2) change file attributes, (3) edit files, (4) get file version and date information, and (5) delete files and directories. Want to know more?

- To launch any NLM or to connect to remote servers for file manipulations, *CPQFM.NLM*'s commands are extended and also apply to the remote file system.
- To view a menu of appropriate file or directory commands and functions, highlight the file or directory and press **Tab** (the majority of *CPQFM.NLM* functions are under the **Tab** menu).
- To view all version and date information for a specific CDM (Custom Device Module), DSK, HAM (Host Adapter Module), LAN, NLM, or PSM (Platform Support Module) file, just highlight the file and press **Enter.**
- To delete the highlighted file or directory tree, just press **Del**.

For more information about Compaq Server Management, checkout the Integration Note: Focus on Compaq Server Health in a NetWare Environment.

Compaq Management CD-ROM Release 4.30

Here's a great freebie!

Use the Compaq Management CD-ROM utilities and agents to easily monitor and manage your Compaq servers, workstations, desktops, and portables.

Contents include the following:

- Compaq Insight Manager v4.30 — Industry-leading application for efficiently managing networks, desktops, and servers.

Downloaded from www.Manualslib.com manuals search engine

- Compaq Management Agents for Servers — Data collection and repository agents that provide in-depth subsystem information concerning statuses and faults on Compaq servers, workstations, desktops, and portables.
- Compaq Survey Utility — Enhanced serviceability tool that delivers online configuration capture and comparison. This utility also gives you the ability to view the Integrated Management Log while your server is running.
- Diskette Builder Management — Utility that automates the creation of installation diskettes for products on this management disc.
- Systems Management Toolkit — Integration tool that unifies third-party management products with Compaq Insight Manager.

If you already have your copy of the Management CD-ROM, then let's waste no time.

- To install and mount the disc…. Do you remember? For information on mounting the CD-ROM, look back at the **IMPORTANT** tip under the SmartStart install.
  - To install the Compaq Insight Management Server Agents and update all Agents in memory and on the hard drive, type [VOL_NAME]:\AGENTS\NETWARE\ENG\COMPAQ\CPOAGIN.NLM.
  - To install the Compaq Survey Utility, type [VOL_NAME]:\SURVEY\NETWARE\ENG\SINSTALL.NLM. Do you want the utility to automatically load during server startup and perform its system logging? Just type SINSTALL –IAUTO_INST. In fact, when you use this option, the utility will automatically perform system logging every Wednesday at noon.

Software Application Tips

To switch between software applications, just press **Ctrl+Esc**. This quick click (easier done than said) brings up the Task Manager that aids in application switching. Whenever you want to return to the system console, just press **Ctrl+Esc,** then **Esc** once more. You can also press **Alt+Esc** to toggle between console screens.

Here comes another great freebie!

To use the free *Novell LAN Workplace for DOS*, check out the NetWare Client CD-ROM in *\PRODUCTS\DOSWin32*. LAN Workplace is a DOS-based TCP/IP stack used to communicate with the server from a DOS or Windows 3.x-based client.

When using *NWTAPE.CDM*, any applications that use Advanced SCSI programming Interface (ASPI) will not work properly; instead, to make your backup, you should use the SBACKUP program provided with NetWare 5.

Using ConsoleOne with NetWare 5

Whew! There's a lot of confusion with ConsoleOne, the ConsoleOne GUI, the Java Console, the Java GUI, the Java X-GUI, and the XWindows GUI. Maybe it's because Java is the buzzword of the Internet, and we all love to drop those buzzwords amongst our Internet buddies. Right? GUI is also a great buzzword. And face facts, GUI just sounds like state-of-the-art computerese. However, we often misuse this terminology until it becomes an imbedded definition in our personal technology database. So let's clear the air and start speaking the same lingo.

First of all, ConsoleOne is the Novell *management application software*—written in Java—that brings data closer to the user with no loss of control. Java is an Internet–standard *programming*

Downloaded from www.Manualslib.com manuals search engine

language. And the only correct GUI in the first paragraph is the XWindows GUI, discussed in a later section. That's it. Nothing fancy; nothing more.

Now with more tips….

- To launch ConsoleOne, use the command **C1Start**. Both ConsoleOne and XWindows will launch.
- To display specific information about hardware components and specific drivers—such as slot number and hardware instance number—place your mouse over a driver's name when in NetWare 5's graphical installation. Then press **Enter**.

Using Java Applications with NetWare 5

NetWare 5 and its compatibility with Java, an Internet-standard, programming language, demonstrates Novell's direction in the Internet world. Here are two tips to help you work better with Java applications.

- To force a Java application to launch in a new window, type JAVA –NS. Any Java programs launched will then appear as separate entries in the Task Manager (**Ctrl+Esc**).
- To kill all Java-based applications, except ConsoleOne, type JAVA –KILLALL at the command prompt. Individual Java applications can also be shut down by typing JAVA –SHOW to obtain the process number; then type JAVA –KILL followed by the ID number of the process you want to kill.

Using NDS with NetWare 5

A well-integrated family of directory-based services, Novell Directory Services (NDS) helps you centrally manage user access privileges and security across the Internet and your enterprise intranets and extranets. Of prime importance, it provides proxy, firewall, and virtual private network services. And, even if you don't install NetWare 5, you can use this great directory service on most networking systems. But you probably already know this.

What you might not know is that to install NDS, as well as NetWare 5, itself, you must have a Network Interface Controller (NIC) already installed with the proper driver. Without a functional NIC, your directory services installation is doomed for failure. So plan ahead for this installation.

IMPORTANT: The latest version of NDS, also compatible with NetWare 5.1, was originally named NDS v8. The name, however, has been changed to NDS eDirectory with the rollout of NetWare 5.1. So if you look for more information on NDS, it'll be under NDS eDirectory.

And our last NDS tips….

- Since the release of NetWare 5, the screen saver has been separated out of monitor and has begun authenticating users to NDS before unlocking the console. Although a step in the right direction, you can only unlock the console if you have Supervisor rights to the NDS Server Object.
- **SERVER –ND** will allow the server to boot without loading NDS.

For more NDS tips, visit the Novell website or see the two Integration Notes: Compaq Tips and Tricks for Novell Directory Services (NDS) and Novell Directory Services (NDS) Billion Object Tree.

Downloaded from www.Manualslib.com manuals search engine

You can also learn more about NDS from the book *Administering NDS Corporate Edition,* written by some of Novell's finest techies and covering the ins and outs of administering eDirectory or NDS Corporate Edition on a daily basis. Best of all, you'll find tips and tricks for administering NDS on three OS platforms: NetWare, Microsoft Windows NT, and Solaris Unix. Reserve a copy for your private library from www.Amazon.com or www.BarnesandNoble.com. Just one quick ordering tip: make sure you search for "Administering NDS 8." It's a little naming hiccup, and the online bookstores haven't made the name change yet.

Using XWindows with NetWare 5

To add items to the XWindows menu, edit *SYS:JAVA\NWGFX\ FVWM2\FVW2RC5XX.* This file contains menus and menu items displayed when the Novell button is pushed. The syntax of menu items is a little tricky, but there are many examples in the file itself. With some experimenting you should be able to launch your favorite programs with only a few clicks on the XWindows menu.

Yes, you can see examples.

Note: Just to be safe, we recommend that you first make a backup of a working *FVW2RC5XX.*

More tips….

- To prevent XWindows from loading at startup, remark, or comment out, the STARTX.NCF line from the *AUTOEXEC.NCF* file by adding **REM** or **(#)** or **(;)** to the beginning of the line.
- To kill the XWindows GUI and immediately return to the command prompt, press and hold the **Ctrl** and **Alt** keys while simultaneously pressing the **Backspace** key.

Think about this last XWindows GUI tip for a minute. The ability to easily load and unload the GUI while the system keeps cburning away is a tremendous boost to your system's performance.

Now, we'll switch to some hardware tips.

Hardware/Firmware Tips

There's nothing like a robust Compaq server! Our sales figures prove this. In fact, on November 2, 1999, Compaq delivered its three-millionth server, which is more than the combined shipments of IBM, HP, and Dell. And did you know that over 50% of Compaq servers are running with NetWare? Now that's compatibility and integration. And that's peace of mind. From intelligent fault handling to PCI Hot Plug-compatible components, Compaq servers have been designed in conjunction with Novell's development of network operating systems. This is especially true with NetWare 5.

In case you haven't heard, the NetWare 5 Online Competency Center is a good source for the most comprehensive information on migrating a company to NetWare 5. It includes a migration planner, software tools, information on finding resellers, and details on purchasing a Compaq Prosignia Server with NetWare 5 pre-installed.

Working together, the Compaq and Novell Partnership has made the ability to hot plug drives, arrays, and controllers into a reality. Consequently, this dynamic team has virtually eliminated system downtime. Additionally, instance loading and unloading of drivers—as well as well-paved migration paths—make troubleshooting, repairing, and upgrading more efficient processes.

Server Installation and Configuration Tips

Novell recommends the following minimum requirements for running NetWare 5:

Downloaded from www.Manualslib.com manuals search engine

Item	Recommended Requirements
Processor	100-MHz Pentium processor
RAM	128 MB of RAM (if Java is used)
Required size of SYS Volume	1 GB
Dos Partition	50 MB plus any additional space required for creating a core dump
NetWare 5 online documentation	Additional 409 MB of disk space

Here are some partitioning tips.

Have you ever needed to add a Compaq System Partition to a drive that had already been partitioned? It isn't pretty. Before Power Quest Corporation's ServerMagic you had to completely wipe out the disk and then start over; however, with ServerMagic you can breeze through the procedure. Let's walk through the process—first on NetWare then on Microsoft Windows NT.

Let's say you have already partitioned your disk drive, but don't have a system partition in place. Because the system partition is required to be the first partition, you would normally delete at least the first partition and then start over. With ServerMagic, however, you can resize the NetWare partition from the *left edge*. (Left edge refers to the beginning of the partition.)

Actually this is very helpful because you don't need to move all the data on the partition. If you have used ServerPartition on the desktop, you are familiar with the fact that it just resizes the right edge (the end of the partition). So, without ServerMagic, if you had wanted to free up even just a small amount, say 20 to 30 megabytes, you would have had to (I) resize the partition, then (2) move all the data over by that amount, then (3) create a Compaq System Partition on the drive. If you had a volume that contained 50 gigabytes, this took a lot of precious time.

However, with ServerMagic you can quickly create just enough space for a Compaq System Partition by simply resizing the left edge and vacating only the data needed.

Here's the ServerMagic procedure for NetWare:

1. Start ServerMagic.
2. Dismount all volumes.
3. Select the drive.
4. Select the NetWare partition that starts at the front or beginning of the drive.
5. Select Partition Options.
6. Select Resize Left.
7. Specify the size.
8. Watch in wonder at how quickly everything happens.

Once space has been freed at the beginning of the disk drive, insert the Compaq SmartStart CD-ROM and proceed with the System Configuration Utility to add the Compaq System Partition.

Here's the ServerMagic procedure for Microsoft Windows NT:

Downloaded from www.Manualslib.com manuals search engine

1. Start ServerMagic on Windows NT.
2. Select the drive.
3. Resize (reduce) the first partition by 20 to 30 megabytes.
4. Move the partition right leaving free space on the drive at the beginning.
5. Click the Apply button. (The server will reboot and run ServerMagic in boot mode.)
6. After ServerMagic appears, insert the Compaq Smart Start CD-ROM and proceed with the System Configuration Utility to add the Compaq System Partition.

That's it! You no longer need to completely re-install and rebuild the drive just because someone deleted or never created the Compaq System Partition.

A few more important installation tips.

- To prevent the NetWare Peripheral Architecture (NWPA) from autoloading drivers, use the **NWPA \NALOAD** command in the *STARTUP.NCF* file. Without autoload, the system will load only the custom device modules (CDMs) that are manually loaded in the *STARTUP.NCF* file. By manually loading CDMs, you can be certain that a specific value-add feature provided by the manufacturer is available. If you don't disable autoload, NetWare 5 will merrily chug along and load the default CDMs for all devices detected by NWPA as well as those CDMs that are manually loaded.
- Some issues, however, have been found with devices where only the manufacturer provided CDMs should have been used, but other default CDMs had been loaded. Specifically, when using a SCSI tape drive to make a backup, you should use the CDM that is recommended by the backup application manufacturer.
- To bring up your server, use either the **RESET SERVER** or the **RESTART SERVER** commands. Remember that in NetWare 5, you don't need the **DOWN** command:
- **RESET SERVER** warm boots your system.
- **SERVER –ND** starts the server without loading NDS. Also see "Using Novell Directory Services with NetWare 5."
- **SERVER –NA** starts the server without executing *AUTOEXEC.NCF*.
- **SERVER –NS** starts the server without executing *STARTUP.NCF*. Generally, this command also stops the execution of the *AUTOEXEC.NCF* since SYS: is not mounted.

Note: However, if there is an *AUTOEXEC.NCF* in the *C:\NWSERVER* directory when you use the **SERVER –NS** command, *AUTOEXEC.NCF* will execute.

- **RESTART SERVER** brings the server down and then backup by unloading, then reloading NetWare 5. So, **RESTART SERVER** doesn't actually reboot your entire system—just the operating system. This is great if you've made any changes to the *AUTOEXEC.NCF* and *STARTUP.NCF* files. Besides, it's faster than **RESET SERVER**.
- To shut down your server and not reload NetWare 5, use the **DOWN** command in place of the old **DOWN** and **EXIT** combination. And rest easy, events that have been keyed to **EXIT** will still function with the **DOWN** command since **DOWN** alone now triggers the **EXIT** events.

Downloaded from www.Manualslib.com manuals search engine

- As we have already stated, some NLMs are contained inside the *SERVER.EXE* file. These NLMs are called *bound-in* and are loaded in a predetermined order when the server is started. Here are a few more specifics about these NLM characters
  - To load a bound-in NLM, you must add an asterisk to the filename—for example, *FILENAME.NLM—to indicate that the file is located in *SERVER.EXE.*
  - To unload a bound-in NLM, type UNLOAD FILENAME.NLM just like you do when unloading ordinary NLMs.
  - To replace an older version on of an in-bound NLM, place the newer version in the *SERVER.EXE* startup directory. This will force the server to use the newer version
- To access infrequently used options and make last-minute changes in your server installation, click the Customize button on the Server Summary screen. Now breathe a sigh of relief because here's where you can easily modify any prior incomplete or incorrect options. You can also access options—such as the SNMP parameters—that aren't necessary in every installation.

Here's a great tip on installing a root certificate.

To install a root certificate from a NetWare 5 server into Internet Explorer, just follow these steps:

1. Access the secure page. The Security Alert dialog starts.
2. Click the View Certificate button. This initiates a Certificate dialog.
3. Select the Certification Path tab.
4. Select Organization CA Certificate.
5. Click the Select the View Certificate button. This initiates a new Certificate dialog.
6. Satisfied with this certificate? Click the Install Certificate button on the General tab. This initiates the Certificate Manager Import Wizard.
7. Select Next on each dialog presented.
8. Select Finish. A dialog, called Root Certificate Store, pops up showing you all of the information for the Root Certificate and asking if you want to add the certificate to the Root Store.
9. Select Yes. (A dialog pops up saying the import was successful.)
10. Select OK on all of the remaining dialogs to get back to the Security Alert dialog.
11. Select Yes to access the page.

From now on, anytime you access this server, the Security Dialog won't appear.

Some important configuration tips.

- To obtain general information about a server and its configuration, peruse the software on the NetWare 5 CD-ROM. Just run *TECHWALK.NLM* located in *SYS:SYSTEM*. Four things happen:
  1. Techwalk a little nosey and asks a few brief questions concerning the administrator.
  2. If the answers are acceptable, the program scans the *AUTOEXEC.NCF*, *STARTUP.NCF* and *INETCFG.NCF* files.

Downloaded from www.Manualslib.com manuals search engine

3. Teckwalk then records all information and settings in an output file for your records.
4. Just read the output file and follow the instructions.

But, if you require more information about the server than Techwalk has provided, don't panic—the *SURVEY.NLM* utility on the Compaq Management CD-ROM can generate an in-depth hardware and configuration report. Survey also supplies information about IRQs, array configurations, and other hardware details. The latest version of Survey even provides a web server for obtaining server information remotely.

- Lastly, **SERVER.EXE** has several command-line parameters that might be helpful in debugging driver and server configuration issues.

Here's a quick way to dupe your server configurations.

To quickly make duplicate installations of your NetWare 5 servers, use the Novell **COPY** command and the *RESPONSE.TXT* file that contains all the necessary configuration information stored from the original system. (We assume that you have already installed NetWare 5 and have correctly configured one server.) First, copy the *SYS:SYSTEM\INSTALL\RESPONSE.TXT* to a floppy diskette. Then start the installation on a second server with the **INSTALL \RF=PATH_TO_FILE*RESPONSE.TXT*** command. The installation program will use all the configuration information stored from the original system to setup your next server.

Memory Tips

To configure the virtual memory usage for NetWare 5, enter the **SWAP** command at the console. You would think that this command immediately swapped some memory. You might even be a little hesitant to use it. No horror stories with this one. **SWAP** simply produces a complete list of commands that allow you to configure the virtual memory for your server.

A word of caution: Any programs that make use of virtual memory will be affected by these settings.

Some information on the Integrated Management Log.

Server health error messages are stored in the Integrated Management Log (IML), a designated section of NVRAM (non-volatile RAM). Error messages include fan failure detection, caution temperature detection caution, power supply monitoring, ECC memory monitoring, and automatic server recovery. To view and analyze these error messages, you need to load the Integrated Management Log Viewer (*CPQIML.NLM*). But even before that, you must load the Novell Event Bus (*NEB.NLM)* in the *STARTUP.NCF*, then the Compaq Server Health Driver (*CPQHLTH.NLM*). Now you can load the IML Viewer and take the proper action. Also see the "Drivers and Utilities" section.

Monitor and Screen Saver Tips

Don't like the Novell splash screen, or just tired of seeing it today. Here are your options:

- To prevent the Novell splash screen from appearing, you can create an empty text file called *SHOWLOGO.NLM* and save it in *C:\NWSERVER*.
- If you like simplicity and simple keystrokes, just type SERVER -NL at the DOS prompt when starting the server; the server obeys without any back talk and permanently prevents the splash screen from appearing.

Downloaded from www.Manualslib.com manuals search engine

Love the Novell splash screen? Well, when it's your turn to start the server, just type SERVER –L, which forces the server to display the splash screen from then on. If you want to see something other than the default logo screen, type *SHOWLOGO –F NWLOGO.BMP and create the file *C:\NWSERVER\NWLOGO.BMP*. Pay attention: This BMP file needs to be exactly 640x480, 256 colors, and go by the *NWLOGO.BMP* file name; otherwise it won't load or display properly.

And since we're now discussing the visual aesthetics of your server, we have some good news and some bad news about the Snakes screen saver. If you're a former NetWare 3.x or 4.x user, you won't find your wriggly, mobile snakes in NetWare 5's *MONITOR.NLM*. However, to activate those reptiles, you won't have to perform two separate functions: (1) locking the console and (2) activating your screen saver. To do both functions in one command, simply type SCRSAVER ACTIVATE. Voila! Snakes. (Like most screen savers, the snakes can also be configured to activate automatically, locking the console at the same time.)

To deactivate the screen saver and unlock the console, use your password and log in as the administrator. Then type UNLOAD SCRSAVER.

Network Tips

Well, we're almost to the end of our tips and tricks, but don't stop reading yet. Some great jewels are still coming.

- Periodically, spurious or lost hardware interrupts might occur. So how do you chase these down? Well, to see if a device is generating interrupts, type **DISPLAY INTERRUPTS** to see which interrupts are currently active. In the case of a NIC, this usually indicates network activity.
- The Special Compatibility Mode Driver (*SCMD.NLM*) will maintain IPX compatibility in an IP-only network. When installing your NetWare 5 server, selecting the IP-Only option will not prevent IPX applications from functioning. Support for the IPX applications on the IP network is handled by *SCMD.NLM*.
    - *SCMD.NLM* enables NetWare 5 to transmit and receive IP and IPX data across what is essentially a single protocol network.
    - If IP Only is selected, *SCMD.NLM* will be loaded automatically by *AUTOEXEC.NCF*.
    - By removing the SCMD line from *AUTOEXEC.NCF*, all IPX compatibility will be lost on an IP-Only network.

Note: Some components of NetWare 5, including ConsoleOne, still use the IPX protocol, therefore it is not recommended to remove *SCMD.NLM* in an IP-only environment.

Processor Tips

Here's some processor command tips:

- To view all detected processors and their statuses, enter the command **DISPLAY PROCESSORS**. In NetWare 5, this command shows how many processors are detected and their current state.
- The **STOP PROCESSORS** command will change the state of all SMP processors to offline.
- The **START PROCESSORS** command will enable all available processors in the server.

Downloaded from www.Manualslib.com manuals search engine

- Both the **START** and **STOP** commands can be used to isolate a single CPU by adding the CPU number that is given by the **DISPLAY PROCESSORS** command, for example**, STOP PROCESSOR 3** or **START PROCESSOR 4**.

IMPORTANT: Processor 0 cannot be stopped.

Storage Tips

Drives are getting bigger and bigger and bigger. Currently, Compaq—and the rest of the world—only sells 9-GB hard drives or larger. In 2000, Compaq will also begin to sell 36-GB and 72-GB bard drives and, eventually, discontinue the 9-GB hard drives. So you might want to think about updating your drives.

If you replace all drives in an array with larger capacity drives, the available space on the current volume remains the same with new, extra capacity available as free space. You could also combine the additional space with the remaining space on the newer drives and claim the space as a logical drive. Logical drives can then be assigned a new volume or linked to a volume. If the logical drive is linked to a volume, the users will see additional storage space without ever having lost access to the server

By adding the space to an existing volume, a single volume can continue to grow virtually without limits. When this procedure is combined with PCI Hot Plug Array Controllers, you can upgrade your storage to additional arrays whenever necessary—without interrupting access to any data on the array.

To distribute data to newly added drives, use the Expansion feature of the Compaq Online Configuration Utility (*CPQONLIN.NLM*). When new drives are added to an array, you can expand the volumes on that array and include the new drives. There's only one catch! If you add physical drives to an array and you expand the array to include the new drives, you cannot remove the new drives later. It makes sense if you think about it. If you distribute data among all available physical drives in an array, the newly added drives would then contain portions of the data that spans all the drives. Remove a drive and poof! Your data disappears.

Some more storage tips….

- In any RAID array, you can substitute any larger drive for any smaller drive. The additional space, however, will not be available until all drives in the array have been upgraded to the larger capacity. In other words, the maximum space available on any array is limited by the capacity of the smallest drive in the array.

  IMPORTANT: Do not remove more physical drives than the fault tolerance of the array allows. The volume could fail; any information being written to the array would be lost.

- Remember when loading Compaq custom drivers for drives and adapters, you don't have to use the **SLOT= parameter**. The new drivers automatically load for each instance of the device that is detected by the system.

Want some tips on adapters (also called controllers)?

- To quickly get a list of currently detected storage adapters and attached devices, type LIST STORAGE ADAPTERS at the command prompt. **LIST STORAGE ADAPTERS** is often preferable to the **LIST DEVICES** command because **LIST STORAGE ADAPTERS** does not scan the bus for all new devices. Obviously, in systems with numerous adapters and

Downloaded from www.Manualslib.com manuals search engine

devices, **LIST STORAGE ADAPTERS** is much faster. The list displays both bound devices and unbound devices and their identification numbers.

Wow! Instant updating!

- To access your array adapters, use *CPQARRAY.HAM*. Most of you already know this. But did you know that with a little more than a snap of the fingers you can update *CPQARRAY.HAM* in memory. That's right! Just copy the driver to the server, and type CPQARRAY.HAM. Done! There's no need to unload and reload drivers while the server is running. And yes, this works for *CPQFC.HAM*, *CPQSCSI.HAM*, and actually, any *CPQ*.HAM*.

- Compaq valued-add drivers give you the ability to remove or add a single instance of a driver, called instance unloading and loading. To remove a single instance of an adapter driver (.HAM) so that the card can be removed or replaced, type REMOVE STORAGE ADAPTER=ADAPTER_ID. By doing instances unload of a driver, identical devices that use the same driver are unaffected. This way, you can replace a single failed adapter while allowing the others to maintain server ready.

- The **ADAPTER_ID** parameter is user specified. If you do not know in which slot the card you need resides or if you don't know your adapter identification, use the **LIST STORAGE ADAPTERS** command to view all installed storage controllers, their locations, and their IDs.

Some NSS tips.

Did you know that the 64-bit Novell Storage Services (NSS) can't recognize an older 12-bit FAT system? That's right. Truly a powerful, indexed-storage solution, NSS shatters current file limitations and remount times. So, naturally, it requires a more powerful, later model engine, like (1) Caldera 7.02 or later, (2) MS-DOS 6 or later, or (3) Novell DOS 7 (NDOS7) or later. Simply put: only 16-bit FAT systems can be used with NetWare 5. Maybe that's one of the reasons that Novell has conveniently included Caldera 7.02 (formerly called NDOS7) on its NetWare 5 CD-ROM.

Did you know that you can mount any free space on any standard volume as an NSS volume? In fact, in order to take advantage of the added performance and functionality of NSS, you can convert any free space on any standard volume—regardless of the current file system—into an NSS volume. However, only the free space remaining in a volume may be converted; data areas on the drive cannot be converted without destroying the data.

Note: See NSS HELP for more information on other structures that can be mounted as NSS volumes.

Some CD-ROM tips.

- To load CD-ROM support without loading other NSS support, type NSS CD9660 at the server console. Once loaded, the CD-ROM acts as a standard NSS volume allowing PC-compatible CD-ROMs to be made available for clients.

- To load CD-ROM support but provide access to MacIntosh formatted CD-ROMs, type NSS CDHFS. The NSS CD-ROM module also supports automatic mounting/dismounting on compact disc eject and insertion.

- If you need to mount/dismount both MacIntosh and PC-formatted CD-ROMs, load *CDROM.NLM*.

Some info on partitioning.

To easily create multiple partitions under NetWare 5 on a single drive, read further.

Downloaded from www.Manualslib.com manuals search engine

- NetWare 5 accommodates additional drive space more readily than previous versions by allowing up to four NetWare partitions per drive.
- In NetWare 4.x, you would have had to delete a partition and volume and rebuilt them to take advantage of extra free space on a drive. However, in NetWare 5, you can simply create a second, third, or even a fourth partition and assign it a volume without disturbing current disk partitions.
- The ability to create additional partitions is particularly useful when you upgrade from a smaller physical drive to a larger one.
- Since you can create more partitions, simply mirror the smaller drive onto the larger drive. Then create a new volume on the remaining space to reclaim it without having to backup and rebuild the original partition.
- Want to access your server's DOS partition remotely? No problem.
  - First, make the server's DOS partition available to clients by mounting the DOS partition as an NSS volume using the **DOSFAT** command. Remote access to the DOS partition allows for remote access to the server startup files. Loading *DOSFAT.NSS* does not change the file structure of the DOS partition, rather, *DOSFAT.NSS* acts as a translator.
  - Your server's DOS partition will then magically appear as a new volume.
  - You can then set NDS permissions for this new volume.

IMPORTANT: If remote access to the DOS partition is made available, you should carefully note this in NDS. Why? Because if you're not careful, other users will access critical files and then modify or delete them.

- With the implementation of the Dynamic Memory Allocation (DMA) feature in NetWare 5, LAN drivers that assume that logical addresses are equal to physical addresses can cause intermittent data corruption. So, if you have LAN drivers that were certified before 11/1/97, you might see this problem. To be safe, use only certified DMA drivers that ship with your OS. Click here for a complete list of certified hardware and software for NetWare 5.

Helpful Websites

Well, we've mentioned a lot of websites where you can get more information, but we're making it even easier by adding this great one-stop-shopping table. Enjoy.

Compaq and Novell websites for NetWare 5 information and products

Item	Web Location
Compaq *ActiveAnswers* (NetWare)	http://vcmproapp02.compaq.com/ActiveAnswers/Global/en/solutions.1144/default.asp
Compaq *ActiveAnswers* Resource Paq for Novell CD-ROM	http://www.compaq.com/partners/novell/resourcepaq-order.html
Compaq Info Messenger	http://www.compaq.com/infomessenger
Compaq Insight Manager	http://www.compaq.com/sysmanage
Compaq Management CD-ROM	http://www.compaq.com/support/files/server/MGMTSOL/index.html
Compaq NetWare 5 Online Competency Center	http://www.NW5OCC.com
Compaq Option ROMPaq	http://www.compaq.com/support/files/server/Netware/index.html

Downloaded from www.Manualslib.com manuals search engine

Compaq and Novell websites for NetWare 5 information and products (cont)

Item	Web Location
Compaq Remote ROM Flash Utility	http://www.compaq.com/support/files/server/softpaqs/Netware/remntwr.html
Compaq SmartStart Subscription Service	http://www.compaq.com/support/paqfax/1233.html
Compaq SSD for Novell Products	http://www.compaq.com/support/files/server/softpaqs/Netware/NSSD.html
Compaq Survey Utility for NetWare	http://www.compaq.com/support/files/server/softpaqs/Netware/nwsurvey.html
Compaq System ROMPaq	http://www.compaq.com/support/files/server/ROMPAQ/index.html
Current Novell Patchlist	http://support.novell.com/misc/patlst.htm
Customer Advisories	http://www.compaq.com/support/techpubs/customer_advisories/Customer_Advisories_Novell.html
Press releases	http://www.compaq.com/newsroom/pr
SoftPaqs (complete listing)	http://www.compaq.com/support/files/server/Netware/index.html
White Papers and other technical document (complete listing)	http://www.compaq.com/support/techpubs/whitepapers/index.html

Conclusion

We hope you have benefited from these NetWare 5 tips. We've really enjoyed compiling them. A special thanks should be given to all the engineers, technicians, and marketing folks who generously contributed the tips. If you have any special hints, tricks, or operating tips to share with your fellow NetWare 5 users, please email them to novell.feedback@compaq.com.

Downloaded from www.Manualslib.com manuals search engine